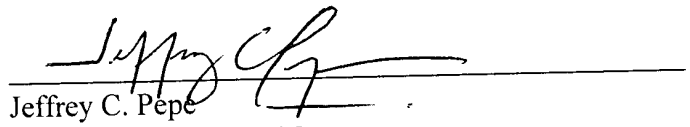
REMARKS

The enclosed electronic and paper copies of the Sequence Listing include no new material. The above amendments merely direct the insertion of the Sequence Listing into the specification and the insertion of sequence identifiers for claims 28-30, 33-35, and 44-52 as required by 37 C.F.R. § 1.821(d). Applicants respectfully submit that the above-identified application is now in compliance with 37 C.F.R. §§ 1.821-1.825.

Attached hereto is a marked-up version of the changes made to the claims by the current amendment. The attached Appendix A is captioned **"Appendix A: Version With Markings To Show Changes Made"**.

Respectfully submitted,

Seed Intellectual Property Law Group PLLC



Jeffrey C. Pepe
Registration No. 46,985

Enclosures:
- Computer Diskette
- Declaration Regarding Computer Diskette
- Paper Copy of Sequence Listing
- Copy of Notice to Comply

701 Fifth Avenue, Suite 6300
Seattle, Washington 98104-7092
Phone: (206) 622-4900
Fax: (206) 682-6031

(JCP:ljt) 248196

Appendix A:
Version With Markings To Show Changes Made

In the specification:

The paragraph beginning at page 63, line 8, has been amended as follows:

These peptides are derived from domains found in PMPs or other molecules that are either known to or predicted to stimulate one or more of the inherent antimicrobial functions of leukocytes such as neutrophils, monocytes, macrophages, and/or lymphocytes. Example sequences in this category are:

PMP-2_{1-22}: Ser Asp Asp Pro Lys Glu Ser Glu Gly Asp Leu His Cys Val Cys Val Lys Thr Thr Ser Leu Val (SEQ ID NO:96);

PMP-2_{1-37}: Ser Asp Asp Pro Lys Glu Ser Glu Gly Asp Leu His Cys Val Cys Val Lys Thr Thr Ser Leu Val Arg Pro Arg His Ile Thr Asn Leu Glu Leu Ile Lys Ala Gly Gly (SEQ ID NO:97); and

SEQUENCE No. 17 (e.g. RP-15).

The paragraph beginning at page 63, line 22, has been amended as follows:

Variants of the above sequences or those present in Figure 12, which have the described modifications in their Glu - Leu - Arg (ELR) and/or sixth basic residue components may also be suitable. Examples include:

21-K-PMP-2_{1-22}: Ser Asp Asp Pro Lys Glu Ser Glu Gly Asp Leu His Cys Val Cys Val Lys Thr Thr Ser Lys Val (SEQ ID NO:98);

ELR-PMP-2_{1-22}: Ser Asp Asp Pro Lys Glu Ser Glu Gly Glu Leu Arg Cys Val Cys Val

Lys Thr Thr Ser Leu Val (SEQ ID NO:99);

21-K,ELR-PMP-2_{1-22}: Ser Asp Asp Pro Lys Glu Ser Glu Gly Glu Leu Arg Cys Val Cys Val Lys Thr Thr Ser Lys Val (SEQ ID NO:100);

21-K,CC-PMP-2_{1-22}: Ser Asp Asp Pro Lys Glu Ser Glu Gly Asp Leu His Cys Cys Val Lys Thr Thr Ser Lys Val (SEQ ID NO:101);

ELR,CC-PMP-2_{1-22}: Ser Asp Asp Pro Lys Glu Ser Glu Gly Glu Leu Arg Cys Cys Val Lys Thr Thr Ser Leu Val (SEQ ID NO:102); and

21-K,ELR,CC-PMP-2_{1-22}: Ser Asp Asp Pro Lys Glu Ser Glu Gly Glu Leu Arg Cys Cys Val Lys Thr Thr Ser Lys Val (SEQ ID NO:103).

The paragraph beginning at page 64, line 23, has been amended as follows:

These include logical and/or strategic mosaic constructs of the above peptides in the categories above. Conceptually, these mosaic peptides will consist of one or more domains exerting direct microbicidal and/or microbiostatic activity linked or otherwise combined with one or more domains exerting leukocyte potentiating activities. Examples (only a few of the logical constructs achievable from combining the above peptides) are listed below:

RP-1/PMP-2_{1-22}: Ala Leu Tyr Lys Lys Phe Lys Lys Lys Leu Leu Lys Ser Leu Lys Arg Leu Gly Ser Asp Asp Pro Lys Glu Ser Glu Gly Asp Leu His Cys Val Cys Val Lys Thr Thr Ser Leu Val (SEQ ID NO:104);

RP-11/PMP-2_{1-22}: Ala Leu Tyr Lys Arg Leu Phe Lys Lys Leu Lys Lys Phe Ser Asp Asp Pro Lys Glu Ser Glu Gly Asp Leu His Cys Val Cys Val Lys Thr Thr Ser Leu Val (SEQ ID NO:105); and

RP-1/21-K,ELR-PMP-2_{1-22}: Ala Leu Try Lys Lys Phe Lys Lys Lys Leu Leu Lys Ser Leu Lys Arg Leu Gly Ser Asp Asp Pro Lys Glu Ser Glu Gly Glu Leu Arg Cys Val Cys Val Lys Thr Thr Ser Lys Val (SEQ ID NO:106).

In the claims:

Claims 28-30, 33-35, and 44-52 have been amended as follows:

28. The antimicrobial peptide composition of Claim 26, wherein said peptide contains an amino acid core sequence aa_1-aa_2-aa_3-aa_4-aa_5-aa_6-aa_7-aa_8-aa_9-aa_{10}-aa_{11}-aa_{12}-aa_{13}-aa_{14}-aa_{15}-aa_{16}-aa_{17}, wherein aa_1 is the amino-terminus of the peptide core sequence and is alanine; aa_2 is threonine; aa_3 and aa_4 are lysine; aa_5 is asparagine; aa_6 is glycine; aa_7 is arginine; aa_8 is lysine; aa_9, aa_{11}, aa_{13} and aa_{17} are leucine; aa_{10} is cystine; aa_{12} is aspartic acid; aa_{14} is glutamine; and aa_{15} and aa_{16} are alanine (SEQ ID NO:14).

29. The antimicrobial peptide composition of Claim 26, wherein said peptide contains an amino acid core sequence aa_1-aa_2-aa_3-aa_4-aa_5-aa_6-aa_7-aa_8, wherein aa_1 is the amino-terminus of the peptide core sequence and is arginine; aa_2 is phenylalanine; aa_3 is glutamic acid; aa_4 is lysine; aa_5 is serine; aa_6 is lysine; aa_7 is isoleucine; and aa_8 is lysine (SEQ ID NO:15).

30. The antimicrobial peptide composition of Claim 26, wherein said peptide contains an amino acid core sequence aa_1-aa_2-aa_3-aa_4-aa_5-aa_6-aa_7-aa_8-aa_9-aa_{10}-aa_{11}-aa_{12}-aa_{13}-aa_{14}-aa_{15}-aa_{16}-aa_{17}-aa_{18}-aa_{19}-aa_{20}, wherein aa_1 is the amino-terminus of the peptide and is serine; aa_2 is alanine; aa_3 is isoleucine; aa_4 is histidine; aa_5 is proline; aa_6 and aa_7 are serine; aa_8 is isoleucine; aa_9 is leucine; aa_{10} is lysine; aa_{11} is leucine; aa_{12} is glutamic acid; aa_{13} is valine; aa_{14} is isoleucine; aa_{15} is cystine; aa_{16} is isoleucine; aa_{17} is glycine; aa_{18} is valine; aa_{19} is leucine; and aa_{20} is glutamine (SEQ ID NO:16).

33. The antimicrobial peptide composition of Claim 32, wherein said peptide contains the amino acid sequence aa_1-aa_2-aa_3-aa_4-aa_5-aa_6-aa_7-aa_8-aa_9-aa_{10}-aa_{11}, wherein aa_1 is the

amino-terminus of the peptide and is lysine; aa_2 is phenylalanine; aa_3 is lysine; aa_4 is histidine; aa_5 is tyrosine; aa_6 and aa_7 are phenylalanine; aa_8 is tryptophan; aa_9 is lysine; aa_{10} is tyrosine; and aa_{11} is lysine (SEQ ID NO:18).

34. The antimicrobial peptide composition of Claim 32, wherein said peptide contains the amino acid sequence aa_1-aa_2-aa_3-aa_4-aa_5-aa_6-aa_7-aa_8-aa_9-aa_{10}-aa_{11}, wherein aa_1 is the amino-terminus of the peptide and is lysine; aa_2 is glycine; aa_3 is tyrosine; aa_4 is phenylalanine; aa_5 is tyrosine; aa_6 is phenylalanine; aa_7 is leucine; aa_8 is phenylalanine; aa_9 is lysine; aa_{10} is phenylalanine; and aa_{11} is lysine (SEQ ID NO:19).

35. The antimicrobial peptide composition of Claim 32, wherein said peptide contains the amino acid sequence aa_1-aa_2-aa_3-aa_4-aa_5-aa_6-aa_7-aa_8-aa_9-aa_{10}-aa_{11}, wherein aa_1 is the amino-terminus of the peptide and is lysine; aa_2 is tryptophan; aa_3 is lysine; aa_4, aa_5, aa_6, aa_7 and aa_8 are tryptophan; aa_9 is lysine; aa_{10} is tryptophan; and aa_{11} is lysine (SEQ ID NO:20).

44. The antimicrobial peptide composition of Claim 36, wherein said peptide contains the amino acid sequence aa_1-aa_2-aa_3-aa_4-aa_5-aa_6-aa_7-aa_8-aa_9-aa_{10}-aa_{11}-aa_{12}-aa_{13}, wherein aa_1 is the amino-terminus of the peptide and is proline, aa_2 is arginine, aa_3 is isoleucine, aa_4 and aa_5 are lysine, aa_6 is isoleucine, aa_7 is valine, aa_8 is glutamine, aa_9 and aa_{10} are lysine, aa_{11} is leucine, aa_{12} is alanine, and aa_{13} is glycine (SEQ ID NO:21).

45. The antimicrobial peptide composition of Claim 36, wherein said peptide contains the amino acid sequence aa_1-aa_2-aa_3-aa_4-aa_5-aa_6-aa_7-aa_8-aa_9-aa_{10}-aa_{11}-aa_{12}-aa_{13}-aa_{14}-aa_{15}-aa_{16}-aa_{17}-aa_{18}-aa_{19}, wherein aa_1 is the amino-terminus of the peptide and is lysine, aa_2 is tryptophan, aa_3 is valine, aa_4 is arginine, aa_5 is glutamic acid, aa_6 is tryosine, aa_7 is isoleucine, aa_8 is asparagine, aa_9 is serine, aa_{10} is leucine, aa_{11} is glutamic acid, aa_{12} is methionine, aa_{13} is serine, aa_{14} and aa_{15} are lysine, aa_{16} is glycine, aa_{17} is leucine, aa_{18} is alanine, and aa_{19} is glycine (SEQ ID NO:22).

46. The antimicrobial peptide composition of Claim 36, wherein said peptide contains the amino acid sequence aa_1-aa_2-aa_3-aa_4-aa_5-aa_6-aa_7-aa_8-aa_9-aa_{10}-aa_{11}-aa_{12}-aa_{13}-aa_{14}-aa_{15}-aa_{16}-aa_{17}-aa_{18}-aa_{19}-aa_{20}, wherein aa_1 is the amino-terminus of the peptide and is glutamic acid, aa_2 is tryptophan, aa_3 is valine, aa_4 is glutamine, aa_5 is lysine, aa_6 is tryosine, aa_7 is valine, aa_8 is serine, aa_9 is asparagine, aa_{10} is leucine, aa_{11} is glutamic acid, aa_{12} is leucine, aa_{13} is serine, aa_{14} is alanine, aa_{15} is tryptophan, aa_{16} and aa_{17} are lysine, aa_{18} is isoleucine, aa_{19} is leucine, and aa_{20} is lysine (SEQ ID NO:107).

47. The antimicrobial peptide composition of Claim 36, wherein said peptide contains the amino acid sequence aa_1-aa_2-aa_3-aa_4-aa_5-aa_6-aa_7-aa_8-aa_9-aa_{10}-aa_{11}-aa_{12}, wherein aa_1 is the amino-terminus of the peptide and is serine, aa_2 is tryptophan, aa_3 is valine, aa_4 is glutamine, aa_5 is glutamic acid, aa_6 is tryosine, aa_7 is valine, aa_8 is tryosine, aa_9 is asparagine, aa_{10} is leucine, aa_{11} is glutamic acid, and aa_{12} is leucine (SEQ ID NO:108).

48. The antimicrobial peptide composition of Claim 36, wherein said peptide contains the amino acid sequence aa_1-aa_2-aa_3-aa_4-aa_5-aa_6-aa_7-aa_8-aa_9-aa_{10}-aa_{11}-aa_{12}-aa_{13}-aa_{14}-aa_{15}-aa_{16}, wherein aa_1 is the amino-terminus of the peptide and is alanine, aa_2 is asparagine, aa_3 is serine, aa_4 is glycine, aa_5 is glutamic acid, aa_6 is glycine, aa_7 is asparagine, aa_8 is phenylalanine, aa_9 is leucine, aa_{10} is alanine, aa_{11} is glutamic acid, aa_{12}, aa_{13} and aa_{14} are glycine, aa_{15} is valine, and aa_{16} is arginine (SEQ ID NO:109).

49. The antimicrobial peptide composition of Claim 36, wherein said peptide contains the amino acid sequence aa_1-aa_2-aa_3-aa_4-aa_5-aa_6-aa_7-aa_8-aa_9-aa_{10}-aa_{11}-aa_{12}-aa_{13}-aa_{14}-aa_{15}-aa_{16}-aa_{17}-aa_{18}-aa_{19}-aa_{20}, wherein aa_1 is the amino-terminus of the peptide and is alanine, aa_2 is asparagine, aa_3 is serine, aa_4 is glycine, aa_5 is glutamic acid, aa_6 is glycine, aa_7 is asparagine, aa_8 is phenylalanine, aa_9 is leucine, aa_{10} is alanine, aa_{11} is glutamic acid, aa_{12}, aa_{13} and aa_{14} are glycine, aa_{15} is valine, aa_{16} is arginine, aa_{17} is lysine, aa_{18} is leucine, aa_{19} is isoleucine, and aa_{20} is lysine (SEQ ID NO:110).

50. The antimicrobial peptide composition of Claim 36, wherein said peptide contains the amino acid sequence aa_1-aa_2-aa_3-aa_4-aa_5-aa_6-aa_7-aa_8-aa_9-aa_{10}-aa_{11}-aa_{12}-aa_{13}, wherein aa_1 is the amino-terminus of the peptide and is glutamic acid, aa_2 is glycine, aa_3 is valine, aa_4 is asparagine, aa_5 is aspartic acid, aa_6 is asparagine, aa_7 and aa_8 are glutamic acid, aa_9 is glycine, aa_{10} and aa_{11} are phenylalanine, aa_{12} is serine, and aa_{13} is alanine (SEQ ID NO:27).

51. The antimicrobial peptide composition of Claim 36, wherein said peptide contains the amino acid sequence aa_1-aa_2-aa_3-aa_4-aa_5-aa_6-aa_7-aa_8-aa_9-aa_{10}-aa_{11}-aa_{12}-aa_{13}-aa_{14}-aa_{15}-aa_{16}-aa_{17}-aa_{18}, wherein aa_1 is the amino-terminus of the peptide and is lysine, aa_2 is phenylalanine, aa_3 is asparagine, aa_4 is lysine, aa_5 is serine, aa_6 is lysine, aa_7 is leucine, aa_8 and aa_9 are lysine, aa_{10} is threonine, aa_{11} is glutamic acid, aa_{12} is threonine, aa_{13} is glutamine, aa_{14} is glutamic acid, aa_{15} is lysine, aa_{16} is asparagine, aa_{17} is proline, and aa_{18} is leucine (SEQ ID NO:111).

52. The antimicrobial peptide composition of Claim 36, wherein said peptide contains the amino acid sequence aa_1-aa_2-aa_3-aa_4-aa_5-aa_6-aa_7-aa_8-aa_9-aa_{10}-aa_{11}-aa_{12}-aa_{13}-aa_{14}-aa_{15}, wherein aa_1 is the amino-terminus of the peptide and is alanine, aa_2 is asparagine, aa_3 is leucine, aa_4 is isoleucine, aa_5 is alanine, aa_6 is threonine, aa_7 and aa_8 are lysine, aa_9 is asparagine, aa_{10} is glycine, aa_{11} is arginine, aa_{12} is lysine, aa_{13} is leucine, aa_{14} is cystine, and aa_{15} is leucine (SEQ ID NO:29).